Technics

QUARTZ Direct Drive Automatic Turntable System

SL-QD33R

T4P is the standard mark for the "P-mount" plug-in-connector system. Products carrying this mark are interchangeable and compatible with each other.

OPERATING INSTRUCTIONS

These instructions also apply to units of different color

Before operating this unit, please read these instructions completely.

Dear Stereo Fan

We want to thank you for selecting this product and to welcome you to the growing family of satisfied Technics product owners around the world.
We feel certain you will get maximum enjoyment from this new addition to your home.
Please read these operating instructions carefully, and be sure to keep them handy for convenient reference.

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Before Use

Be sure to disconnect the mains cord before adjusting the voltage selector.
Use a minus (−) screwdriver to set the voltage selector (on the rear panel) to the voltage setting for the area in which the unit will be used.

Note that this unit will be seriously damaged if this setting is not made correctly. (There is no voltage selector for some countries; the correct voltage is already set.)

Suggestions for Safety

■ Use a standard electrical AC wall outlet

1. **Use from an AC power source of high voltage, such as for air conditioners, is very dangerous.**
   Be extremely careful not to make a connection to the electrical outlet for a large air conditioner or central-heating unit which uses high voltage, because there is the possibility of fire.
2. **A DC power source cannot be used.**
   Be sure to check the power source carefully, especially on a ship or other place where DC is used.

■ Connection and removal of the power cord plug

1. **Wet hands are dangerous.**
   A dangerous electric shock may result if the plug is touched by wet hands.
2. **Don't pull the power cord.**
   Always grasp the plug; never pull the cord itself.

■ Never attempt to repair or reconstruct this unit

A serious electric shock might occur if this unit is repaired, disassembled or reconstructed by unauthorized persons, or if the internal parts are accidently touched.

■ For families with children

Never permit children to put anything, especially metal, inside this unit. A serious electric shock or malfunction could occur if articles such as coins, needles, screwdrivers, etc. are inserted through the ventilation holes, etc. of this unit.

■ Turn off after use

If the unit is left for a long time with the power on, this will not only shorten its useful operation life, but may also cause other unexpected trouble.

■ If water is spilled on the unit

Be extremely careful if water is spilled on the unit, because a fire or serious electric shock might occur. Immediately disconnect the power cord plug, and consult with your dealer.

■ Place the unit where it will be well ventilated, and away from direct sunlight

Place this unit at least 10 cm (4") away from wall surfaces, etc., and away from direct sunlight.

■ Keep the unit away from heaters, etc.

Heat can damage the external surfaces as well as internal circuits and components.

■ Avoid spray-type insecticides

Insecticides might cause cracks or "cloudiness" in the cabinet and plastic parts of this unit. The gas used in such sprays might, moreover, be ignited suddenly.

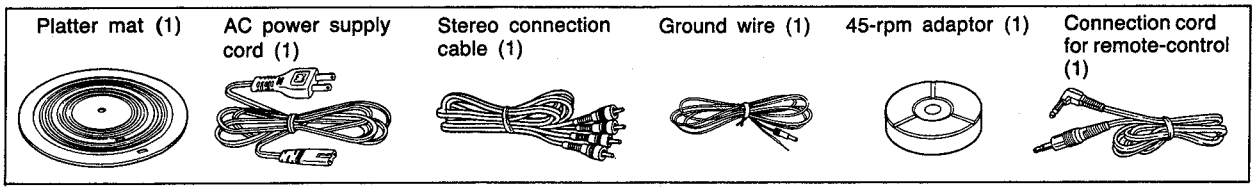
■ Never use alcohol or paint thinner

These and similar chemicals should never be used, because they may damage the finish.

■ If trouble occurs

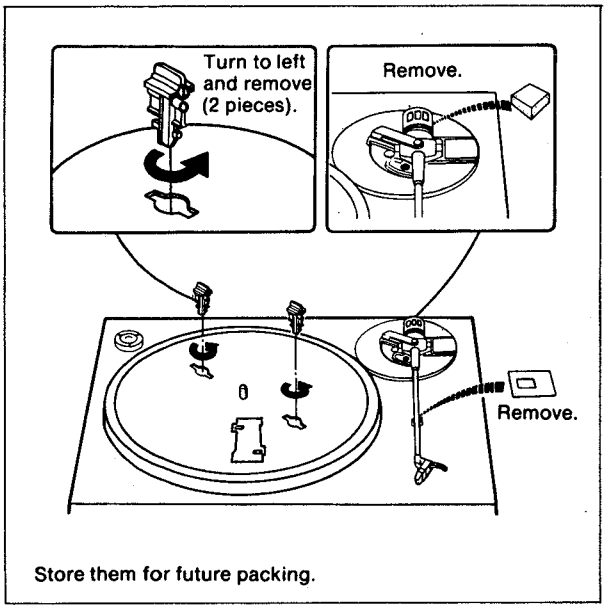
If, during operation, the sound is interrupted or indicators no longer illuminate, or if abnormal odor or smoke is detected, immediately disconnect the power cord plug, and contact your dealer or an Authorized Service Center.

Accessories



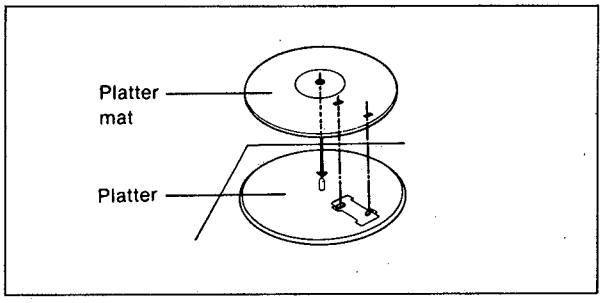
Turntable Assembly

1. Remove the packing spacers.

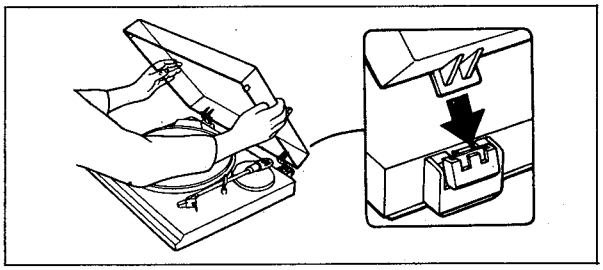


Store them for future packing.

2. Place the platter mat on the platter.

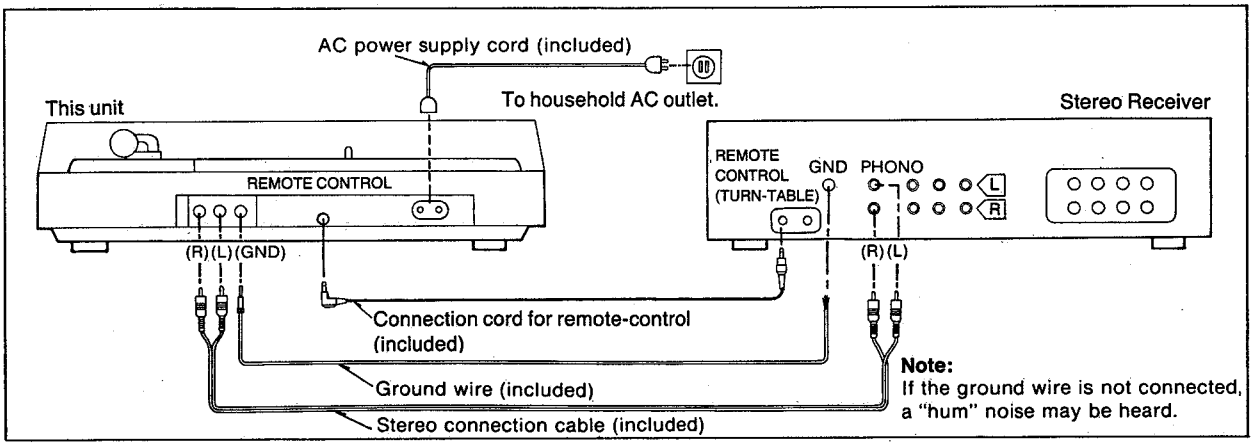


3. Install the dust cover.



Connections

Connection cord for remote-control is included in this unit. By using this connection cord, you can connect to Technics Quartz Synthesizer AM/FM Stereo Receiver only with remote control capability. Refer to the operating instructions of the receiver.

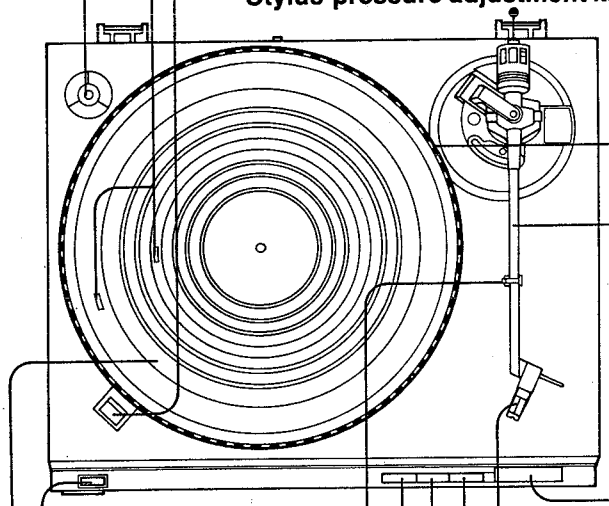


Note:
If the ground wire is not connected, a "hum" noise may be heard.

Operation

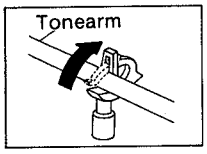
Note:
This switch turns on and off the secondary circuit power only. The unit is in the "standby ⏻" position. Regardless of the switch setting, the primary circuit is always "live" as long as the power cord is connected to an electrical outlet.

- **45-rpm adaptor** (See below.)
- **Record size detector**
  Detects the size of the record on the platter automatically [for 30 cm (12") and 17 cm (7") records only.]
- **Strobe-illuminator/pilot lamp**
- **Stylus-pressure adjustment knob** (Refer to page 5.)



- **Strobe lines**
  The strobe-illumination of this unit employs a strobe-illuminator synchronized with the precise frequency of the quartz.
  Note:
  The strobe illuminator is not synchronized with fluorescent lamps.
- **Tonearm**
  Notes:
  - The tonearm will automatically return to the arm rest by moving the tonearm to the center position by hand when the cueing indicator is not illuminate.
  - If the power switch is pressed during play, the tonearm will not rise and, then stop above the disc at that point. Press the power switch again to return the tonearm to the rest position. (The indicator above the start/stop switch will flash.)

4 **Arm clamp**
Remove the arm clamp.

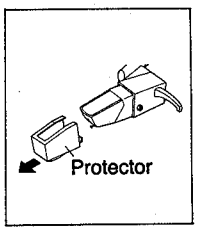


3 **Speed selector (speed)**
Set to disc's speed.

2 **Power "standby ⏻, on" switch (power "standby ⏻, on")**
"on" (■→▬)
(The strobe-illuminator/pilot lamp will illuminate.)

1 **Platter mat**
Place a disc on the platter mat.

5 **Remove the stylus protector.**
(There is no protector according to the manufacturer. Configuration of the protector differs according to the manufacturer.)



Cartridge
14P is the standard mark for the "P-mount" plug-in-connector system. Products carrying this mark are interchangeable and compatible with each other.

6 **Press.** (Play will start, and the indicator will illuminate.)

Start/stop switch/ indicator (start/stop)
- **Press to stop the play.** (The indicator will go out.)
  Note:
  Do not try to clean the dust cover while a disc is playing, because static electricity might cause the tonearm to rise.

- **Cueing switch/indicator (cueing)**
  Press to stop play temporarily. (The indicator will illuminate.)
  To resume the play, press again. (The indicator will go out.)

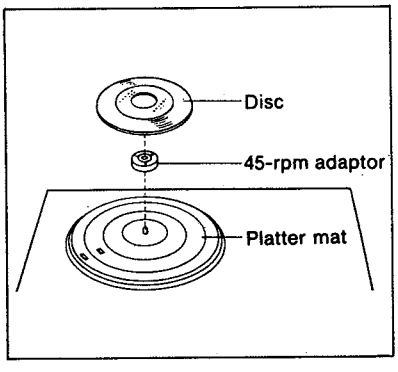
- **Repeat switch/indicator (repeat)**
  Press the repeat switch/indicator before or during play. (The indicator will illuminate.)
  To resume play, press the button again. (The indicator will go out.)
  Note:
  Repeat play can only be used with 30 cm (12") or 17 cm (7") records (standard records)..

Manual play

The following types of discs should be played manually.
- Discs other than 17- or 30-cm discs
- Lightweight discs such as "Sonosheets"
- Badly warped discs

1. Follow the steps 1~5 of the automatic play.
2. Set the cueing control to the "▽" position.
3. Move the tonearm to the desired position by hand.
   (The platter will start turning.)
4. Set the cueing control to the "▽" position. (Play will start.)

■ For a 17-cm (7") (large center hole) disc

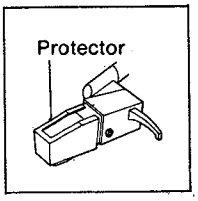


■ When play ends

1. The tonearm will automatically return to the arm rest (the automatic return feature).
2. Rotation will stop.

■ After use

1. After listening is finished, the power "standby ⏻, on " switch of this unit should be turned "off".
2. Attach the arm clamp.
3. Attach the stylus protector.

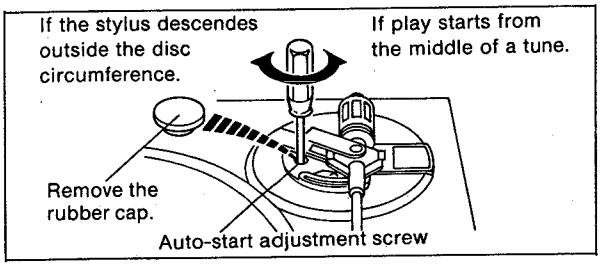


Adjustment

Adjustment of the automatic-start position

This adjustment is preset at the factory. If play starts from the middle of a tune, or the stylus descends outside the disc circumference, make the necessary adjustment.

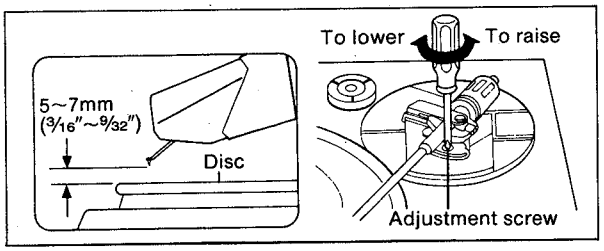
1. Adjust to the desired automatic start position.
2. Check to be sure the automatic-start position is correct.



Adjustment of the stylus-to-disc clearance

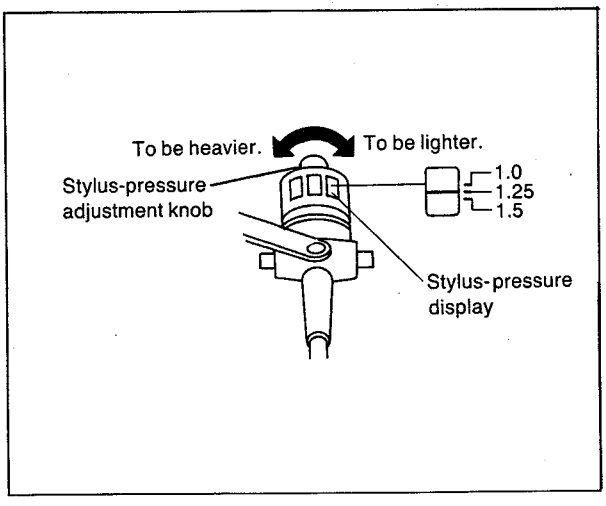
This adjustment is preset at the factory. This adjustment should not be necessary unless the cartridge or stylus is changed.

1. Press the cueing switch. (The indicator will illuminate.)
2. Move the tonearm to a position above the disc.
3. Adjust the stylus tip positon.



Stylus pressure adjustment

This adjustment is preset to "1.25" at the factory.
If the stylus "skips" or if there is distortion of the sound of a disc with a high recording level, etc., set to "1.5" to increase the stylus pressure.
If the knop is set to "1.0" the stylus pressure will be lighter.

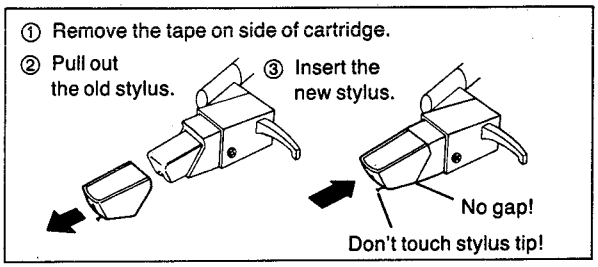


Replacement

Replacement of the stylus

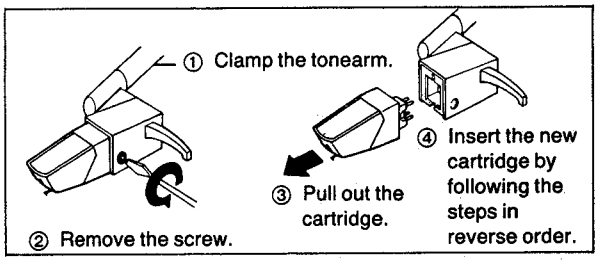
If noise is heard from new discs, the stylus is probably worn. Replace it with a new one.

- Stylus life ..... approx. 500 hours
- New stylus EPS-30ES



Replacement of the cartridge

The plug-in type of cartridge is already designed to match this unit in every respect: weight, correct stylus pressure, stylus tip position, center of gravity, etc. This means that there's no longer any need for troublesome connection of lead wires or adjustment of the stylus pressure.



Maintenance

To clean dust from the stylus

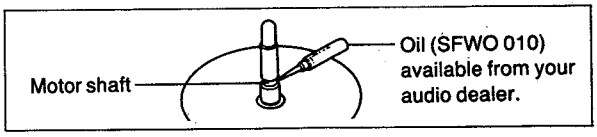
Use a soft brush or similar material to gently remove the dust. Thoroughly clean your discs occasionally with a high-quality disc cleaner.

Maintenance of external surfaces

To clean this unit, use a soft, dry cloth.
If the surfaces are extremely dirty, use a soft cloth, dipped into a soap-and-water solution or a weak detergent solution.
Wring the cloth well before wiping the unit.
Wipe once again with a soft, dry cloth.
Never use alcohol, paint thinner, benzine, nor a chemically treated cloth to clean this unit.
Such chemicals may damage the finish of your unit.

Lubricating the motor shaft

Apply 2 or 3 drops of oil after every 2,000 hours of operation.
(Handle the platter carefully during assembly.)
Before drops of oil, remove the platter mat and platter.



Troubleshooting Guide

Before requesting service for this unit, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation.
If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, refer to the directory of Authorized service centers (enclosed with this unit) to locate a convenient service center, or consult your Technics dealer for instructions.

Problem	Probable cause(s)	Suggested remedy
During disc play		
A loud and unusual sound ("howling") is heard when the volume level is increased.	The location of the turntable and speaker systems is unstable.	• If the equipment is unstable because it is located upon a soft surface, such as a carpet, place a solid material (such as concrete blocks, bricks, a hard board, etc.) beneath the speaker systems. • Try moving the turntable farther away from the speaker systems. • Try placing a cushioning material (such as felt or commercially available audio insulators) beneath the turntable.
Unusual scratching noises are heard.	Disc is old or scratched.	• Turn the treble tone control of the amplifier to reduce the treble sound.
	Dust in disc grooves.	• Use a disc cleaner to remove the dust from the disc grooves.
	Stylus needle is worn.	• If the noise is heard even when a new disc is played, probably the stylus is worn. Replace it with a new stylus.
	Dust is attached to stylus tip.	• Remove the dust by using a soft brush.

Technical Specifications

■ TURNTABLE SECTION

Type Quartz direct drive Automatic turntable
Drive method Direct drive
Motor Brushless-DC motor
Drive control method Quartz phase locked control
Turntable platter Aluminum die-cast Diameter 31.2 cm (12-9/32")
Turntable speeds 33-1/3 rpm and 45 rpm
Wow and flutter 0.012% WRMS*
0.025% WRMS (JIS C5521)
±0.035% Weighted zero to peak (IEC 98A weighted)

*This rating refers to turntable assembly alone, excluding effects of record, cartridge or tonearm, but including platter. Measured by obtaining signal from built-in frequency generator of motor assembly.

Rumble 56 dB DIN-A (IEC 98A unweighted)
78 dB DIN-B (IEC 98A weighted)

■ TONEARM SECTION

Type Static-balanced straight tonearm Plug-in-connector cartridge system
Effective length 230 mm (9-1/16")
Overhang 15 mm (19/32")
Tracking error angle Within 2°32' at outer groove of 30 cm (12") record
Within 0°32' at inner groove of 30 cm (12") record
Effective mass 13.5 g (including cartridge)
Stylus pressure adjustment range 1.25±0.25 g
Applicable cartridge weight 6 g

■ CARTRIDGE SECTION

Type Moving magnet stereo cartridge
Magnet circuit All laminated core
Frequency response 10 Hz~40 kHz
Output voltage 2.5 mV at 1 kHz, 5 cm/s. zero to peak lateral velocity (7 mV at 1 kHz, 10 cm/s. zero to peak 45° velocity [DIN 45 500])
Channel separation More than 22 dB at 1 kHz
Channel balance Within 1.8 dB at 1 kHz
Recommended load impedance 47 kΩ~100 kΩ
Compliance (dynamic) 12×10^{-6} cm/dyne at 100 Hz
Stylus pressure range 1.25±0.25 g
Weight 6 g (cartridge only)
Replacement stylus EPS-30ES

■ GENERAL

Power supply AC 50 Hz/60 Hz, 110V~127V/220V~240V
Power consumption 8 W
Dimensions (W×H×D) 430×100×375 mm (16-15/16"×3-15/16"×14-3/4")
Maximum height when dust cover is open: 430×370×410 mm (16-15/16"×14-9/16"×16-1/8")
Weight 4.5 kg (9.9 lb.)

CAUTION

This equipment has been tested and found to comply with the limits for a Class B computing device in accordance with the specifications set forth in Subpart J or Part 15 of the FCC Rules. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment on and off, use the equipment in another location and/or utilize and electrical outlet different from that used by the receiver.

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